DOCUMENT RESUME

ED 202 114 EA 013 563

TITLE	School District Reorganization. A Review of Selected Studies.
INSTITUTION	Minnesota Univ., St. Paul. Educational Cooperative Services Unit.
PUB DATE	77
NOTE	28p.
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Academic Achievement; *Centralization; Class Size; *Consolidated Schools; Cost Effectiveness; Educational Quality; *School District Reorganization; School Size; State Legislation
IDENTIFIERS	*Minnesota; School District Size

ABSTRACT

With the purpose of supplying information on school district reorganization to school districts in Minnesota, this report begins with an overview of reorganization, including a definition of terms, an investigation of the impetus for reorganization, and a discussion of the manner in which school district reorganization legislation is usually enacted. Examination of the findings of national reorganization studies offers information on the relationships between school district size and student achievement, between cost and quality of education, and between class size and student achievement. Studies of school district reorganization in Minnesota are reviewed from an historical perspective. The report concludes that reorganization of school districts is not a panacea for educational problems. The lack of consensus on defining and measuring student achievement further complicates the task of evaluating the efficacy of reorganization efforts. (Author/WD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 021 114

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

SCHOOL DISTRICT REORGANIZATION

A Review of Selected Studies

prepared by

The Educational Cooperative Service Unit, Region XI
223 Health Service Building
University of Minnesota
St. Paul, Minnesota 55108

EA 013 563

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

G G. Mansergh

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

FOREWORD

The controversial 1977 Minnesota school district reorganization legislation, (Senate File #156), although not adopted, provided the impetus for the Planning and Research Commission to charge the ECSU staff with the formation of a study relative to various components of school district reorganization as they would impact the Region XI public schools.

Also, Article X of the Omnibus Tax Bill pertains to the creation of Educational Planning Task Forces by ECSU regions throughout the state. This occurred during the formation of the reorganization study, and provided additional incentive to the ECSU staff to produce a report of value and usefulness to Region XI schools.

The following study, conducted by Richard Savolainen, ECSU Research Assistant, presents a review of the literature relative to school district reorganization in general, school district reorganization in the United States, and school district reorganization in Minnesota.

This study is intended to provide a data base useful to Region XI schools in the analysis and development of school district reorganization plans, and represents an initial step in the creation of comprehensive and timely school district reorganization studies and references.

A Survey of the Components of School District Reorganization

Introduction

In an attempt to provide quality public education in as efficient a manner as possible, many states are considering the possibility of school district reorganization. In order to give adequate consideration to such a proposal, districts require information regarding the various components of school district reorganization. This study attempts to supply such information for Minnesota school districts in Region XI.

The study begins by first presenting a perspective of school district reorganization in general. This is done by providing a definition of "school district organization," investigating the causes of the push for reorganization, presenting the arguments for and against reorganization, and outlining the manner in which school district reorganization legislation is usually enacted.

The study then examines the findings of national reorganization studies, paying particular attention to the relationship between school district size and student achievement, between the cost and quality of education, and between class size and student achievement.

Finally, studies of school district reorganization in Minnesota are surveyed and a brief summary of their findings is presented.

I. School district reorganization in education, a general perspective

There is a marked tendency, in any society, for established behavioral patterns as well as organizational structures to persist in their present form long after social and economic conditions have reached the point where change is necessary for the system to function effectively. In a sense, the present structure of education typifies this situation. Carver, & Sergiovanni (1969), state that schools have traditionally yielded to organizational impulses by providing for organizational needs in a passive and almost docile manner.

There are few problems in American society more crucial and of more immediate concern than those related to the structure of education at the elementary and secondary levels. A great deal of research attention has been focused on the consequences of segmentation of school districts.

Invariably, such studies conclude that there is a need for "reorganization". But, just what is reorganization? Hooker and Mueller (1970) define reorganization as "the legal restructuring of school districts, normally involving the combining of two or more school districts into a single larger administrative unit, or the division of existing districts, such as large cities or counties, into smaller administrative units."

Educational researchers, consultants, statisticians and theorists have long argued over the next question to be discussed; Why has this school district reorganization taken place?

Coleman, 1971, has stated that the main motivation in school district reorganization is "the drive to keep educational structures in step with demands on the educational system." He also states that "In an era of ever-accelerating change, the educational needs of people affected by these changes are undergoing rapid modification and adjustment." The organization of school districts during the past two decades has been unable to provide the programs and services

consistant with the emergent needs of our society. As a result, the educational structure is undergoing critical analysis and evaluation by legislators, business and industrial leaders, and by the professional educators.

The general technique is to establish a set of criteria which are regarded as fundamental to the good school district, to review the status of existing school districts in light of these criteria, and to make recommendations for change which would bring them more nearly into line with the criteria.

A set of criteria developed by the California State Department of Education is characteristic of numerous studies regarding school district reorganization:

1. To produce a more effectively coordinated program of education for all levels of the state's public school system through strong local district organization, with single administrative control over all levels of public education in a given area.
2. To provide a more efficient use of public funds, brought about by the creation of school districts capable of furnishing necessary educational services at a reasonable unit cost.
3. To provide a better and more equalized educational opportunity for all children in the state through the creation of school districts sufficient in size to be able to provide curricular offerings and other services not possible under existing conditions.
4. To effect as great a degree of equalization of financial resources on the local level as circumstances will permit.

Proponents and opponents of school district reorganization have argued over the advantages and disadvantages of the restructuring of school districts for decades. According to Mullins (1975), the following reasons are most frequently cited by proponents of school district reorganization:

1. More economical and efficient operations would be provided because of reductions in administrative staff, fuller utilization of facilities and teachers, savings incurred by bulk purchasing, and combined transportation costs.

2. Confusion and lack of articulation created by separate elementary and high school districts would be eliminated.

3. Comprehensive curriculum and educational programs could only be offered in schools large enough to support them. (Over 100 in graduating class)

4. Inequalities and inequities of educational opportunities of rich and poor school districts residing side by side would be eliminated.

There are a multitude of reasons given for school district reorganization, but they relate to, or have evolved from those listed above.

Opponents of school district organization generally agree on the following reasons opposing school district reorganization:

1. Cost economies in instruction and attendent functions accrue from larger numbers of students, but cost diseconomies from transportation outweigh these economies as more students must be brought to school.

2. Larger school districts aren't necessarily better, as a district gets larger, a monolithic bureaucracy is created.

3. Seiber and Wilder, (1973) note that one of the most dominant elements in the organization of the American school system is the independence and autonomy of the local educational system. Lateral relationhips between districts are not usually provided for in the organizational structure of the state system.

4. In an article by Christopher Jencks, as noted by Ehlers, (1973), equalizing opportunity cannot take us very far toward eliminating inequality.

5. There exist discrepancies in Conant's report relating to school district size, making the validity of the report suspect.

6. Reorganization of a school district would result in the domination of the district by the most politically powerful portion of it. (Loss of local control)

7. Change just to change is unjust. If the districts are operating smoothly now, reorganization isn't necessary.

Various forms of the above reasons are often cited against reorganization, but because of their similarity, the above will suffice.

Finally, the question "How is reorganization enacted?" must be answered. "The concept of the local school district is now being evaluated", as noted by

Faber and Sharron, (1970). Consideration is now being given to State and Federal policies for establishing schools that are racially and economically balanced.

As noted by Campbell, et. al., (1975), various provisions for modifying school district organization have taken place. Although these provisions are enacted as law in some states, severe political wrestling normally occurs in modifying these statutes governing district organization. This accounts for the reluctance of state legislators to act artibrarily in the alteration of existing districts, or in the establishment of new districts. The existence of hundreds of small schools chroughout the United States is evidence of this fact.

As noted by Campbell, (1975), legislation to encourage or to realize school district reorganization is usually classified as permissive, semi-permissive, or mandatory. The three classifications are presented as follows:

I. Permissive Legislation - Permits districts to merge, consolidate, or to reorganize. Local school board action or petitions signed by a specified number of the electors in a local area may start procedures for the joining of two or more districts on the way to final approval or rejection by the voters. Usually no overall planning for an adequate district is required, as stated by Domain and Olson, (1967).

II. Semi-Permissive Legislation - Local districts are free to reorganize within limits incorporated in the law. Reorganization acceptable to the state must be proposed within a specified number of years.

III. Mandatory Legislation - Imposition of the will of the state. Local communities must select committees, specific time schedules for the submission of reorganization proposals for the state agencies for review, recommendations, appraisals, and for a vote of the citizens, financial incentives for reorganizations are incorporated, and financial penalties are enacted upon small, inefficient units which fail to reorganize.

II. School District Reorganization in the United States

Domain and Olson, (1967) state that school district organization in the United States has seldom been static. Reducing the number of school districts has been recognized as imperative if schools are to meet the changing demands of individuals and society.

According to Domain and Olson, (1967), this vast reduction in the number of districts reflects the general recognition by most states that there were far too many basic administrative units to provide an effective and efficient school system.

The early formation of school districts was geared to conditions prevalent at the time. During the early stages of school district development most children attended school for three or four years and then generally only during the winter months when they were not needed for work on the farms. The curriculum was largely limited to the teaching of reading, writing, and arithmetic. The small school districts created in the early 1900's were able to provide these limited programs. They were also well adapted to the existing status of travel, communication, and population distribution available in those times.

Most of these earlier districts operated one-teacher schools located within walking distance of the children attending. The need for these small school districts diminished as roads were improved, school bus service became available, and the geographical size of communities expanded. The one-teacher school was a functional unit in 1900 according to Domain and Olson, (1967).

In their 1967 study, Domain and Olson, (1967), state that the reorganization of school districts does not automatically result in the establishment of adequately sized attendance centers or necessarily mean that any change in attendance centers will follow. This is evidenced by the large number of secondary schools operating in several southern states where the number of school districts is relatively small.

Olson and Domain, (1967) further state that developing criteria for school district organization applicable in all areas of a state of the United States is impossible. The determination of school district adequacy for sparsely-populated areas will necessarily have to differ from the determination of adequacy of school districts in urban areas. The American Association of school administrators (A.A.S.A.), commission on school district reorganization has listed

nine areas in which the effectiveness of school district organization can be examined. The nine areas consist of the following:

1. Educational program
2. Pupil population
3. Financial resources
4. Educational leadership provisions
5. Instructional personnel
6. Use of personnel
7. School plant provisions
8. Framework for operation
9. Provisions for community participation

All of these points are essential considerations in the establishment of school districts, but researchers, State Departments of Education and people knowledgeable about school district adequacy have generally expressed standards for school districts in terms of the pupil population.

Using pupil population as one variable this study will focus on three basic areas. They include the following:

1. The relationship between school district size and student achievement.
2. The relationship between the cost and quality of education.
3. The relationship between the class size, and student achievement.

1. School district size and student achievement

Van D. Mueller, et. al. (1977), states that before 1972, studies of district size approached research methodology, definition of variables, and the form of findings in a way quite different from later investigation. He further states that these earlier studies related to school size used primarily the survey or questionnaire technique and available state records for gathering data. Student and environmental variables were premiere considerations of researchers. Educational process variables, or those factors over which the school district has some control, were left largely untouched. The results of these studies were generally expressed in school district or size recommendations.

Since 1972, several states have been involved in studies of educational quality which have dealt with school size, directly or indirectly, in both varying scope and quality. The consideration of size is linked to the forseeable

possibility of mandating minimum and perhaps maximum structures in allowing for more efficient and effective delivery of educational programs.

Harrow, and Dzrieban, (1972), studies reorganization in Florida and concluded that:

1. Smaller counties had greater administrative costs.
2. Smaller counties had greater difficulty attracting and retaining qualified personnel.
3. Smaller counties offered a narrower educational program.

Fonstad (1973) conducted a study under the direction of the Wisconsin Department of Public Instruction which analyzed data from state reports and concluded that:

1. The number of high school course offerings was related to the size of the high school.
2. The smaller districts in Wisconsin offered fewer shared time services.
3. The smaller districts had smaller pupil/teacher ratios.

The Governors Office in Massachusets formed a Commission on School District Organization and Collaboration that studied and conferred during the 1973-74 school year. Using data from commonwealth reports they concluded:

1. Curriculum breadth was less in small schools.
2. Smaller districts usually found it more difficult to support staff training and renewal programs.
3. Smaller districts had smaller percentages of graduates entering college.

Other studies have produced contradictory results. Bidwell, and Kasarda, (1975) used data from 104 school districts in Colorado and concluded "that size had, overall, a very slight effect on student output, and that as district size increased, the students outran the number of teachers provided.

Timothy Weaver, (1975), in his "Case Against the Preston County Comprehensive Facilities Plan for Consolidating the Schools", controlled his study for I.Q. and socio-economic status. He found no consistent positive correlation between size and achievement independent of I.Q. and social class.

Coleman, et. al. (1966), found school size to be "a variable not significantly correlated with achievement." He also found that the "size of the twelfth grade is negatively correlated with verbal achievement; each additional two-hundred students is associated with a decline of one-fifth grade level of achievement."

Summers and Wolfe, (1975), indicate that "higher achievement results correlated with smaller schools at both the elementary and secondary school levels."

Alkin, (1968), concluded that "neither district size nor financial inputs showed any significant relationship to student achievement."

Thrasher and Turner, (1972), found no significant differences on Iowa Test scores that could be attributed to small school size, and found "no difference in grade point averages of small versus large school graduates in their freshman year of college."

Kiesling, (1968), found "size of school to be negatively related to achivement," and at the twelfth grade level, achievement improved up to about twelve to sixteen hundred students, but when controlled for the background of the child, the child's intelligence and school expenditures, the relationship was converted from positive to negative.

Raymond, (1968), reported on factors affecting freshman year college success and found that consolidation and all other school based factors were unrelated to freshman performance.

Sewell and Haller, (1964), collected data from ten thousand high school seniors in Wisconsin concerning what factors affected their educational aspirations. They discovered that school size had the weakest correlation to college plans of all the variables considered.

Barker, and Gump, (1964), cite in their book, Big School, Small School, "that the actual proportion of students who can participate in the essential activities which support the academic program, the quality of that involvement, and the satisfaction with that involvement, clearly favor the smaller community school over the larger consolidated school."

2. Cost and Quality of Education

Branscomb, (1973) stated that the most pervasive study dealing with cost factors as they relate to the quality of education was undertaken by James Coleman. Known as the Coleman Study, various other researchers have analyzed the findings of the study and generally have agreed upon the finding that spending on schools as they are presently structured, spending on pre-school programs and compensatory education, and desegregation of ghettoized children will not significantly reduce the inequality among Americans.

According to Sher and Tompkins, (1976), research in the area of cost relative to quality education often fails to acknowledge the presence of offsetting diseconomies of scale, i.e., new or enlarged costs attributable to increased size of operations.

White and Tweeten, (1973), studied transportation costs as they affected Oklahoma schools. They concluded that "cost economies in instruction and attendent functions accrue from larger number of students, but cost diseconomies from transportation arise as more students must be brought to school."

Zymelmna, (1973), in his studies on joint purchasing by school districts concluded that "Administrators should carefully consider the full costs of central purchasing because savings might not exceed the added costs of distribution. There are also possiblities of delays and loss of flexibility involved in central purchasing. Finally there is the use of scarce administrative manpower to manage a purchasing and distributing operation that could be handled in the private sector."

According to Sher and Tompkins, (1976), a NEA Report of 1960 dealing with one-teacher schools indicates that personnel costs (which compromise the bulk of any school's operating budget) were usually considerably lower in one-teacher schools.

In a study by Cohn, (1968), evidence was produced demonstrating how instructional costs would multiply in the following manner. The actual pupil-teacher ratio in schools under 200 was 20:1; and in schools over 700, it was 24:1.

Proponents of reorganization generally support the idea that economies of scale would be one result of a restructuring of a school district. Studies such as the following are often alluded to by them as evidence.

Conant, (1959), in his famous report stated that "small high schools can be satisfactory only at exorbitant expense."

Olson and Domain, (1967), cite the following study done by the New Jersey Department of Education as evidence against small districts. "New Jersey school officials believe that small schools in that state avert to high per capita costs only by limiting offerings, restricting expenditures for teacher's salaries, and withholding purchases of desirable educational equipment."

Fitzwater, (1957), concluded that state authorities have found that adequately reorganized districts are able to provide at less cost the services provided by the supplanted districts.

The American Association of School Administrators summarized the dilemma facing small school districts with the following statement: "Small school districts trying to provide an adequate curriculum at operating costs have two alternatives; the first being low-quality instruction, the second being costs at about $1,200.00 per student per year."

The Committee for Economic Development, (1960), has pointed out several important financial advantages which accrue to unified school districts operating on a larger scale. They include:

1. The ability to employ highly qualified school administrators and specialized staff.
2. The ability to plan construction and to acquire appropriate school sites at lower costs when they are available and ahead of needs.
3. To facilitate economies in school design, maintainance of buildings, grounds and equipment, purchasing, and insurance premiums.

According to Van Mueller, et. al., (1977), "despite the theoretical soundness of the input-output approach in studying the cost/benefits of educational resources, current research is inadequate. The inability of researchers to separate school from other environmental inputs, the use of inadequate measures of student cognitive abilities and, the failure to consider non-cognitive behaviors of students lessen the impact of their findings."

"Nevertheless", states Mueller, et. al., (1977), "the studies do provide some indication of school resources which may have a significant impact upon student performance outcomes."

2. Class size and student achievement

Blake, (1954), studied the bulk of class size research done since the beginning of the century. He found that out of the 22 studies he considered valid, 16 favored smaller classes, three favored larger classes, and three reported inconclusive results. Mueller states that (1977), Cunningman, (1932), Pertsch, (1943), and Anderson, (1950; 1963), examined groups of students in specific subject areas. Small class size was significantly related to student achievement only in the 1963 Anderson study.

Spitzer, (1954), used third and sixth graders in an examination of class size and student achievement. The Iowa Test of Basic Skills was the dependent variable. Using four areas of study, he concluded that small classes (fewer than 20) or large classes (thirty or more) were not factors in achievement.

Warburton, (1961), attempted a similiar comparison but with much larger groups. His study focused on twelfth grade English skills for groups of 100+ and 30-35 students. In reading, composition, and listening the larger group was superior.

Johnson & Scriven (1967), in a large study of 7,500 grade 7 & 8 students in English and Mathematics classes with the Iowa Tests found that class size had only an inconsistant effect on academic gains. This held true even when extreme groups (25 or fewer and 33+) were compared.

On the other hand, in a study of first grade students by Frymier, (1964), he found that when groups were controlled for sex, age, and perceptual and auditory handicaps, small classes (-30) made significant gains over large classes (+36). He observed "there seems to be clear evidence here that class size influenced reading achievement for these first grade students."

Woodson, (1968) looked at class size effects on pupil achievement for 95 school systems. He concluded that "there is a small inverse relationship between achievement and class size. Specifically, he observed that "small classes are related to higher achievement on reading and arithmetic scores."

Jencks, (1972), analyzed and re-analyzed the Coleman Report, (1966). He observed a limited relationship between class size and student achievement.

Bidwell and Kasarda, (1975), looked at the relationship between district level variables and student achievement measures for all school districts in Colorado. They concluded that large pupil-teacher ratios were related to declines in achievement scores.

Furno and Collins, (1957), studied the relationship between class size and the achievement of both mainstream and limited ability students in mathematics and reading. They found that students in both categories made significantly greater gains in achievement when placed in smaller classes.

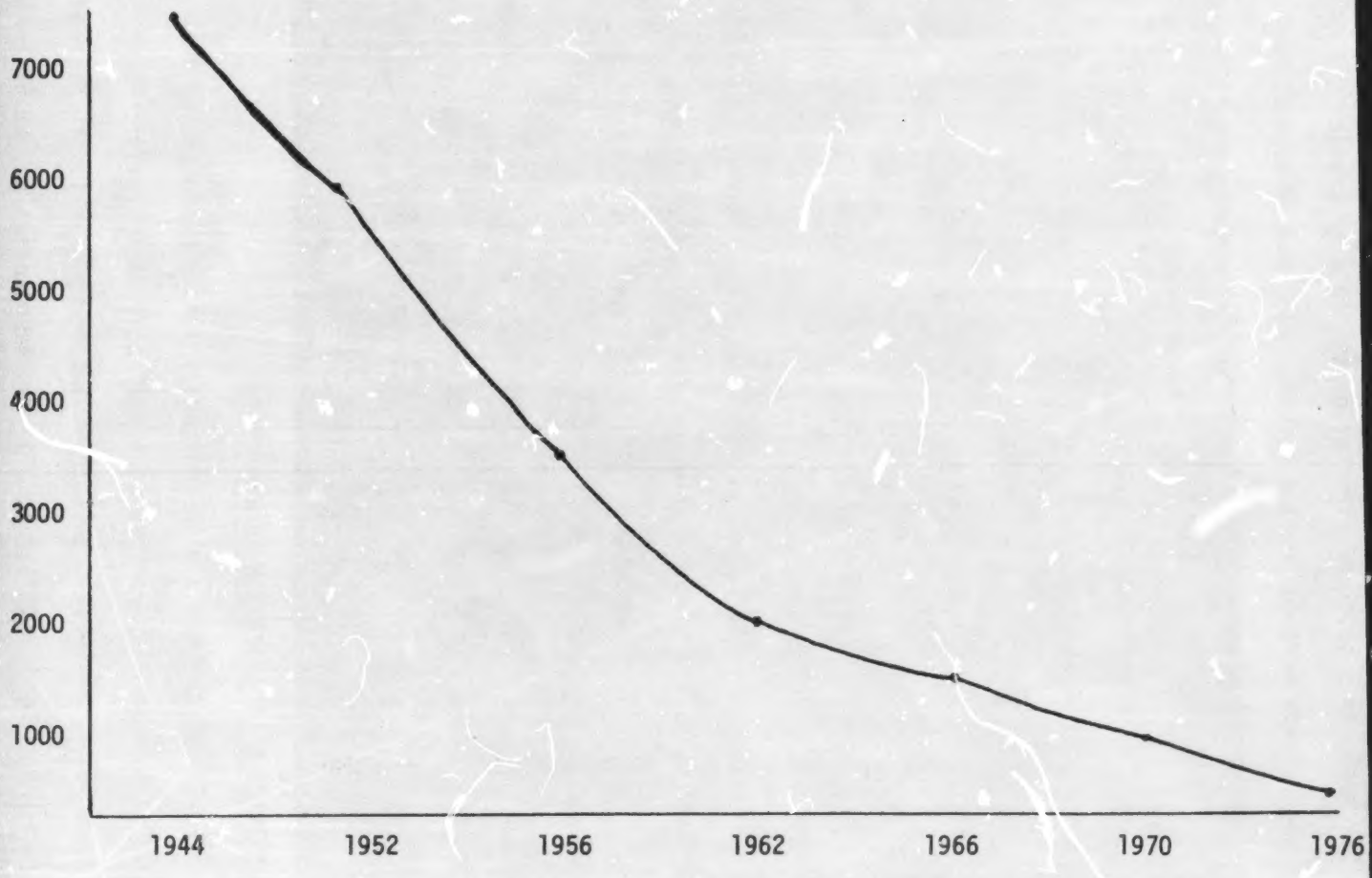
III. SCHOOL DISTRICT REORGANIZATION IN MINNESOTA

The survey of studies concerned with reorganization in Minnesota will be subdivided into two main sections. Section 1 will deal basically with an historical look at school district organization and reorganization in Minnesota.

1. Minnesota School District Organization and Reorganization, an historical perspective.

According to the Minnesota State Planning Agency, (1977), "the organization or reduction of the number of school districts in Minnesota has been a relatively slow process." This is demonstrated in the following chart.

NUMBER OF SCHOOL DISTRICTS IN MINNESOTA



Minnesota's first formal exposure to reorganization came in 1905 when the legislature passed an act to provide for an optional plan for counties to consolidate rural schools. The law provided for the organization and governance of these rural schools and for the transportation of pupils at the public's expense. The intent of the 1905 act and all legislative action that followed was to afford better educational opportunities for all pupils and to make possible a more economical and efficient operation of the schools. In 1947, the legislature passed another statute to facilitate consolidation. The statute (1947 c 741 p. 652) made it possible for all counties to establish a county survey committee whose duty it was to study the districts of their country and make recommendations on reorganization. It was also during the 1947 legislative session that the State Advisory Commission of School Reorganization was begun. This Commission studied the reports of the county survey committees and presented its findings and recommendations to the legislature.

Legislative action up to this time was permissive in nature, giving school districts the alternative of reorganizing if they so desired, but not requiring it. In 1963, however, the legislature took on a more assertive outlook and required all school districts not operating classified schools to dissolve.

In 1967, the legislature, in a similar vein, required all school districts to be part of an independent or special district that maintained a classified elementary school, by 1971.

The effect of these legislative acts was to organize Minnesota school districts from a sprawling, fairly unorganized arrangement into more compact efficient units.

Although, as mentioned earlier, the reorganization process has been rather slow in Minnesota, its results can be plainly seen. Since the 1947 legislation requiring school district reorganization, more than 6,200 districts have merged with other local districts, producing a total of 438 districts today.

2. School District Organization and Reorganization Studies in Minnesota

In reviewing the reorganization studies done in Minnesota one may be surprised at the lack of such studies attempted. However, Mueller, et. al. (1977), has conducted studies dealing basically with school sizes. He states "Minnesota did not have a study on school size per se. However, in the Statewide Assessment Program, community type was one of the variables considered. Communities were grouped into inner city, suburban, small town, and rural categories. Students in suburbs and towns scored significantly above the state means, while students in the large cities were significantly below the state means for all domains and for total reading performance (1, p. 57). Controlling for home socio-economic background, the study still found the type of community to have a significant effect on reading performance."

Mueller further states, "another indicator of the effects of school size is reading performance. The reading performance of Minnesota 11th graders attending schools whose total enrollment is above 1,500 is a little higher than that of students attending schools of other sizes."

Mueller, et. al. (1977), also came to these conclusions after studying school districts in Minnesota, while working on a report of fluctuating enrollments in Minnesota schools.

1. The larger the district, the more experienced the staff.
2. The larger districts tend to have a more highly trained staff than the smaller districts.
3. The cities of the first class school districts have the fewest inexperienced and lower trained professional staff than the state average.
4. Staff tends to be older as school district enrollment declines.
5. Where there is enrollment growth, the districts tend to be larger with high cost per pupil unit and average wealth per pupil unit,
6. Where there is an enrollment decline, the districts tend to have high costs per pupil unit and high wealth per pupil unit.

He concludes that "the governance of education at the state and federal level via legislation and rules and regulations tend to be directed toward specific programs (e.g. mandated special educational programs), whereas the local education agencies need to be concerned with the broader educational

process. The implications of proposed changes in these roles and relationships on educational quality should be carefully considered before organization/governance changes are instituted. The value of the diveristy found in the decentralization of 435 school districts in Minnesota may offer more quality in education than a more centralized system of governance. This issue will require intense consideration of all the possible alternatives in the organization/governance of the Minnesota Educational System."

SUMMARY

As Mullins, (1973) notes, "the point is clear enough: No universal conclusion exists to hold that reorganization of school districts is some sort of panacea for all of education's ills. The lack of concensus among educators and laypersons to define quality in student performance/achievement, clouds the results of studies on school district reorganization."

Despite the results of studies alluding to the benefits of reorganization or consolidation, it is evident that reorganization is not for every district, and it never will be. Many school districts have gone about as far as they can to abolish small school districts. The reason is simple: Not enough youngsters live within a busing radius that is condensed enough to enable further consolidation. However, if many school districts that stretch over huge regions have consolidated to the most reasonable degree possible and educational benefits occur, many other small and medium-sized districts should take a look at how reorganization might enable the facilitation of the educational process to occur in a more effective and efficient way.

BIBLIOGRAPHY

Alkin, M., Economy of Scale in the Production of Selected Educational Outcomes, (Washington, D.C.: AERA, 1968).

American Association of School Administrators, Association of School Business Officials, and National School Board Association, Education is Good Business, Washington, D.C.: American Association of School Administrators, p. 37.

Bidwell, C.C. and J. Kasarda, "School District Organization and Student Achievement." American Sociological Review, 1975, 40, 55-70.

Blake, H. E., "Class Size: A Summary of Selected Studies in Elementary and Secondary Schools." Unpublished Doctoral dissertation, Teachers College, Columbia University, 1954.

Branscombe, Arthur A. "A Mind Bending Analysis--But Is It Valid?" Compact, (Dec., 1972, Jan., 1973), pp. 25-27.

Campbell, Roald F., Luvern L. Cunningham, Raphael O. Nystrand, and Michael E. Usdan, The Organization and Control of American Schools. 3rd ed. Columbus, Ohio: Charles E. Merrill Publishing Company, 1975.

Carver, Fred D., and Thomas J. Sergiovanni, Organizations and Human Behavior: Focus on Schools. New York: McGraw-Hill Book Company, 1969.

Cohn, Elchannan, "Economies of Scale in Iowa High School Operations," Journal of Human Resources (Fall, 1968), pp. 422-34.

Coleman, James, et. al., Equality of Educational Opportunity, Washington, D.C.: U. S. Government Printing Office, 1966.

Conant, James Bryant, The American High School Today, Carnegie Series in American Education (New York: McGraw-Hill, 1959).

Domain, Otto E. and Manley E. Olson, Education 1967 - A Statewide Study of Elementary, Secondary and Area Vocational-Technical Education in Minnesota. Bureau of Field Studies and Surveys, University of Minnesota, 1967.

Effectiveness, Efficiency, and Equal Opportunity in the Public Schools of Massachusetts, Summary Report and Recommendations of the Governor's Commission on School District Organization and Collaboration, October, 1974.

Ehlers, Henry, "The Schools and Equal Opportunity." Crucial Issues in Education. Ed. Christopher Jencks and others. New York: Holt, Rinehart and Winston, Inc., 1973. Chapter 1.9 44.

Faber, Charles F. and Gilbert F. Chearron, Elementary School Administration-Theory and Practice, New York: Holt, Rinehart and Winston, Inc., 1970.

Fitzwater, C. O., School District Reorganization Policies and Procedures, Office of Education Special Series No. 5, United States Department of Health, Education, and Welfare, Washington, D.C.: Superintendent of Documents, Government Printing Office, 1957, p. 87.

Fonstad, Clifford, What Research Says About Schools and School Districts... Factors Related to Effectiveness, Bureau of Organization and Facilities, Division for Field Services to Local Schools, Wisconsin Department of Public Instruction, October, 1973.

Frymier, Jack L., "The Effect of Class Size Upon Reading Achievement in First Grade." Reading Teacher, XVIII, November, 1964, 90-93.

Furno, Orlando, and George Collins, "Class Size and Pupil Learning." Baltimore City Public Schools, Baltimore, Maryland, 1957.

Harrow, Thomas L. and Charles D. Dzrieban, An Investigation in Educational Research Allocation in School Districts. (Paper presented at American Research Association Annual Meeting. Chicago, Illinois, April 3-7, 1972).

Henderson, Donald D. and J. J. Gomez, "The Consolidation of Rural Schools: Reasons, Results, Implications - A Preliminary Investigation." San Francisco, California, 1975. (Paper presented at the annual meeting of the Rural Sociological Society).

Hooker, Clifford P. and Van D. Mueller, The Relationship of School District Organization to State Aid Distribution Systems. Educational Research and Development Council, University of Minnesota, 1970.

Jencks, Christopher, In Mosteller, F. and Moynihan, D. On Equality of Educational Opportunity, Vintage Books, New York, 1972.

Johnson, M. and E. Scriven, "Class Size and Achievement Gains in Seventh and Eighth Grade English and Math." School Review, LXXV, Autumn, 1967, 300-310.

Kiesling, Herbert J., High School Size and Cost Factors, (Report of the U. S. Department of Health, Education and Welfare, Project Number 6-1590, March 1968).

Minnesota State Planning Agency, "Assistance Manual for School District Reorganization" Minnesota State Department of Education (1977).

Mueller, Van D. and Others, "The Impact of Fluctuating Enrollments on Minnesota's Educational System." Volume II. Minneapolis, Minnesota, 1977. (A report to the Minnesota State Legislature).

Mullins, Carolyn, "School District Consolidation: Odds are 2 to 1 It'll Get You," The American School Board Journal, November, 1973, 23-27.

Parker, Robert G. and Paul V. Gump, Big School, Small School (Palo Alto, California: Stanford University Press, 1964).

Raymond, Richard, "Determinents of Primary and Secondary Education in West Virginia," Journal of Human Resources, Vol. 3, No. 4, (Fall 1968).

Sewell, William H. and Arthur O. Haller, "Educational and Occupational Perspectives of Farm and Rural Youth," in Rural Youth in Crisis: Facts, Myths and Social Change, Lee Burchinal, ed. (Washington, D.C.: U. S. Government Printing Office, 1964), pp. 149-72.

Sher, Jonathan P. and Rachel B. Thompkins, "Economy, Efficiency, and Equality: The Myths of Rural School and District Consolidation," Washington, D. C.: 1976. (Report to the National Institute of Education).

Sieber, Sam D. and David E. Wilder, "Interrelationship Between School Districts," The School in Society, Ed. Sloan R. Wayland, New York: The Free Press, 1973, 230.

Spitzer, Herbert, "Class Size and Pupil Achievement in Elementary Schools," Elementary School Journal, LV, L. October 1954, 82-86.

Summers, A. and B. Wolfe, "Which Resources Help Learning?" Business Review, February, 1975.

Thrasher and Turner, School Size Does Make a Difference, (San Diego, California: Institute for Educational Management, 1970).

Warburton, John T., "An Experiment in Large Group Instruction," Journal of Secondary Education, XXXVI, November, 1961, 430-432.

Weaver, Timothy, "The Case Against the Preston County Comprehensive Facilities Plan for Consolidating the Schools," Boston University, 1975.

White, Fred, and Luther Tweeten, "Optimal School District Size Emphasizing Rural Areas," American Journal of Agricultural Economics (February 1973), p. 51.

Woodson, Marshall S., "Effects of Class Size as Measured by an Achievement Test Criterion," IAR Research Bulletin, VIII, February 1968, 1-6.

Zymelman, Manuel, Financing and Efficiency in Education (Boston: Mass.: Nimrod Press, 1973), p. 274.

APPENDIX A

A Summary of the School and District Consolidation Report Submitted to the National Institute of Education

"Economy, Efficiency, and Equality: The Myths of Rural School and District Consolidation"

by

Jonathan P. Sher and Rachel B. Thompkins for the National Institute of Education, U. S. Department of Health, Education and Welfare

The purpose of this research paper is to demonstrate that there is no strong base of empirical data to support the often widely held assumption that school or district consolidation necessarily results in benefits of economy, efficiency, or equality of education.

The Myth of Economy

Drs. Sher and Thompkins attack the myth that large schools save money by pointing out that the diseconomies of size often offset the supposed economies of consolidation. Increases in transportation costs and increases in numbers of personnel needed for joint purchasing and distribution of materials are shown to be such diseconomies.

"When transportation diseconomies are included in the determination of overall educational costs in rural areas, the economies from consolidation tend to decrease markedly or vanish altogether." (p. 6)

"During the 1960's, many small rural school districts banded together to form joint purchasing units so that the presumed scale economies could be captured. Instead of saving money, they discovered that one or more of the following things happened: all the money saved by volume purchasing was lost in distributing the purchases to participating districts, or lost by having to hire new personnel

to organize and operate the purchasing/distribution operations, or lost by having to overpurchase supplies in order to get the volume discounts." (p. 6)

The Myth of Efficiency

Sher and Thompkins attack the myth of efficiency by pointing out that with an increase in scale it is often necessary to decrease services in order to remain at the previous level of spending.

"Far from saving money, consolidated high schools must discard professional staff and raise pupil-teacher ratios to maintain even the approximate level of operating expenses found in the smaller schools." (p. 11)

When dealing with district reorganization, the authors present data which indicates that the savings in administrative costs which come with consolidation are instances of false efficiency. Less money is merely being spent to obtain fewer services.

"While the proportion of administrative costs to total budget dropped with reorganization, the proportion of administrators to pupils and teachers also dropped dramatically.... This means that, of necessity, each student, each teacher, each parent, and each school will receive a much smaller fraction of administrative guidance, assistance, and attention." (p. 14)

Data is also presented to demonstrate that district reorganization has not proven to be an efficient means by which to equalize the distribution of wealth.

"Those districts that have a large tax base relative to the number of pupils will spend more than those districts with a low tax base relative to the number of pupils. A recent review of state and local school finance finds that large districts have a lower assessed valuation per pupil than small districts. Unless the large district taxes itself at a higher rate, or receives more state aid, it will spend less per pupil than the smaller district." (p. 15)

The Myth of Quality

In addition to exposing the myths of economy and efficiency which underly much of the support for consolidation, Sher and Thompkins also present findings which seriously question the belief that size assures better quality. Evidence is presented which disputes the assumption that consolidated schools provide more and better resources. In analyzing the data utilized by James Conant in his study of the American high school, school size is shown to have little correlation with comprehensiveness.

"Large schools ranked both best and worst (on a scale measuring comprehensiveness). The mean score for the group was 8.9. The three small schools evaluated (A with ninty-five seniors, O with seventy-three seniors, and P with one hundred seniors) have scores of eleven, eight and eight, respectively, and three are near, or above, the mean in each case." (p. 21)

A further analysis of Conant's, and additional data, indicates that the achievement levels of students in small schools are generally equal to, or higher than, those of students from large schools. It is also shown that there is little or no correlation between school size and success in college.

The quality of the overall school experience is also analyzed and the authors conclude:

"The actual proportion of students who can participate in the essential activities which support the academic program, the quality of that involvement, and the satisfaction with that involvement, clearly favor the smaller school over the larger consolidated school." (p. 32)

In addition, several studies are cited which find that small schools are generally more apt to receive strong community support for their programs than are large schools.

Conclusion

The authors conclude by pointing out that the lack of evidence supporting the assumption that consolidation is the best strategy for achieving desired educational reform and improvement holds three implications for the developing of future educational policy.

First: small schools deserve more attention; the values of smallness must be recognized and appreciated.

Second: alternatives to consolidation and reorganization should be seriously considered.

Third: research which is done in order to demonstrate the value of an educational practice should be very carefully scrutinized in order to avoid mass movements based on invalid assumptions, such as, the authors believe, has been the case with the consolidation movement.